

ENCODING POSIBILITIES WHEN NO CHANNEL STATE INFORMATION ARE AVAILABLE

BY

VALERIU MUNTENU and DANIELA TĂRNICERIU

Abstract. A discrete, complete and memoryless source that delivers its messages equally likely is considered. By performing a binary Huffman encoding of this source, a compact graph is obtained, in which the code words are placed on the last two levels. For this case the upper and lower bounds of the code word length are computed, as well as the corresponding variances.

Key words: binary Huffman code, compact encoding graph, upper bound, lower bound, codeword length.

DESIGNING HIGH-RATE LINE CODE

BY

LUMINIȚA SCRIPCARIU, PETRUȚ DUMA and IRINA RADINSCHI

Abstract. A New way for high-rate line design as run-length limited (RLL) codes with variable code length is proposed. This concept leads to an improved data rate on the communication channel. There are analysed some classical line codes and better codes are designed and presented.

Key words: line code, Run-Length Limited (RLL) code, data rate.

ON THE LINEAR, NON-AUTONOMOUS, GENERAL TWO-PORT, SIMULTANEOUSLY SUPPLIED AT HIS THREE GATES WITH HARMONIC VOLTAGES HAVING THE SAME FREQUENCY

BY

HUGO ROSMAN

Abstract. Utilizing an analogous proceeding to that used by C. Șora in the study of in restricted sense two-ports, in harmonic steady-state, a novel class of linear, non-autonomous, general two-ports parameters, in the same steady-state, are defined. To obtain these parameters is necessary to supply, simultaneously, such a two-port, at his gates, with harmonic currents having the same frequency.

Key words: linear, non-autonomous, general two-ports; simultaneously supplying with currents; new parameters.